

DEPARTMENT OF ENVIRONMENTAL QUALITY  
AIR QUALITY DIVISION  
ACTIVITY REPORT: On-site Inspection

N089558291

<b>FACILITY:</b> LACKS INDUSTRIES INC		<b>SRN / ID:</b> N0895
<b>LOCATION:</b> 4260 AIRLANE SE, KENTWOOD		<b>DISTRICT:</b> Grand Rapids
<b>CITY:</b> KENTWOOD		<b>COUNTY:</b> KENT
<b>CONTACT:</b> Karen Baweja , Supervisor of Air Quality		<b>ACTIVITY DATE:</b> 05/27/2021
<b>STAFF:</b> April Lazzaro	<b>COMPLIANCE STATUS:</b> Compliance	<b>SOURCE CLASS:</b> MAJOR
<b>SUBJECT:</b> Partial Compliance Evaluation of Airplane North Plater.		
<b>RESOLVED COMPLAINTS:</b>		

**Staff, April Lazzaro arrived at the facility to conduct an unannounced Partial Compliance Evaluation and on-site inspection and met with Karen Baweja, Environmental Manager, Steve Morrissey, Plant Manager and Ben Seitz, Plating Engineer. We were later joined by Steve Greiner, Maintenance Manager. Proper PPE was utilized, and social distancing was maintained to the extent possible during the inspection. The purpose of this Partial Compliance Evaluation was to observe operations at Airplane North and to inspect the control devices in use at the facility.**

**FACILITY DESCRIPTION**

**The Airplane North (FGN-1) and South (FGS-1) facilities primarily conduct decorative hexavalent chrome plating on plastic parts. The process consists of pre-treatment, alkaline cleaning, acid dipping, and strike plating of copper, copper/nickel electroplating, nickel electroplating, chromium etching and chromium electroplating. Electroless copper or nickel electroplating, conditioner, and rack stripping are controlled by wet scrubbers while the chrome plating and etching are controlled by composite mesh pad scrubbers. The facility is a major source of Hazardous Air Pollutants and equipment at the facility is regulated pursuant to MI-ROP-N0895-2018a. No odors or visible emissions were observed as I arrived at the facility.**

**The Airplane Northwest and Airwest Mold facilities conduct plastic injection molding using acrylonitrile, butadiene, styrene (ABS) copolymer and ABS blended with a polycarbonate called HIPP (high impact plastic) that is more temperature and impact resistant. There are no requirements that apply to plastic injection molding support facilities in this permit. These facilities were not inspected as part of this compliance evaluation.**

**The decorative hexavalent chrome plating operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Chromium emissions in Subpart N. All Lacks plating operations use the same PFOS free surfactant product manufactured by MacDermid Enthone. This surfactant is however, a source of PFAS.**

**COMPLIANCE EVALUATION**

**The Operation and Maintenance (O&M) Plan requirements are contained in the facility MAP. The O & M Plan establishes the operating parameters of the control devices and equipment associated with each emission unit. As a result of a 2020 compliance inspection, the O&M Plan was revised to include additional inspection measures to demonstrate ongoing compliance.**

**FGN-1 Evaluation**

## **EUPN-10**

**EUPN-10 consists of three chrome etch tanks, one etch regeneration unit and one evaporator/reclaim unit controlled by a composite mesh pad scrubber. Repairs to this scrubber are ongoing and occur bi-weekly due to the age of the unit. There was visible staining on the exterior of the scrubber and a horizontal support vein was not properly connected to the scrubber body. However, there were no active leaks identified. Lacks has plans to conduct significant maintenance to the unit during the July 2021 plant shutdown. I suggested that Lacks clean up the unit so it looked better, and that they would have an easier time identifying any new issues early. Lacks informed me that they were unable to clean the old stains but plan to paint the unit during the July 2021 maintenance work.**

**This emission unit also has new ductwork from the evaporator/reclaim unit up to the scrubber. It is made of a transparent material called Kynar which is chemical resistant.**

## **EUPN-12**

**EUPN-12 consists of three chrome plate tanks and one purification tank and one evaporator/reclaim unit controlled by a composite mesh pad scrubber. The repairs to the ductwork and scrubber body that were conducted after the 2020 compliance inspection appear to have been maintained and were still in place. I did not observe any issues in the repaired areas, nor did I identify new issues with this scrubber.**

**Each of the stacks on the roof along with any/all accompanying control devices were thoroughly inspected while I was on the roof. No other issues were identified by the visual, olfactory and audible examinations.**

## **FGS-1 Evaluation**

**This flexible group includes 10 emission units that comprise the South Plater-electroplating of copper, nickel and decorative chrome on plastic parts and is located at Airplane South. This flexible group is not currently operational. Lacks continues to report the delay in stack testing in the deviation reports which is appropriate.**

## **CONCLUSION**

**Lacks Airplane was in compliance at the time of the Partial Compliance Evaluation. Photos of EUPN-10 and EUPN-12 are described below.**



**Image 1(EUPN-10)** : Chrome etch scrubber.



**Image 2(EUPN-10)** : Chrome etch scrubber.



**Image 3(EUPN-10)** : Chrome etch scrubber.



**Image 4(EUPN-12)** : Chrome plate scrubber.



**Image 5(EUPN-12)** : Chrome plate scrubber inlet ductwork.



**Image 6(EUPN-12)** : Chrome plate scrubber top inlet.



**Image 7(EUPN-10) :** Photo provided by Lacks of the Kynar ductwork from the evaporator to the roof and scrubber inlet.

NAME April Lazzaro

DATE 06/03/2021

SUPERVISOR HH